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# **APB, SAR, and Nunn-McCurdy Status**



**DAMIR Conference  
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***Wendell Irby***

***Larry Axtell &***

***OUSD(AT&L)***

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# **APB, SAR, and Nunn-McCurdy Status**

## **Acquisition Program Baseline (APB) Status**

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# Acquisition Program Baseline (APB)

## *Purpose*

- Contract between the Program Manager (PM) and the Milestone Decision Authority (MDA) documenting program performance, schedule, and cost goals (objectives)
- Provides reference point for measuring program status
- Establishes the PM's trade space:
  - How is the system supposed to perform?
  - When are critical events to occur?
  - How much will it cost?
- Defines the deviation limits (thresholds) beyond which the PM may not exceed without authorization from the MDA

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# Acquisition Program Baseline (APB)

## *Background*

- Defense Acquisition Improvement Act of 1986 implemented Packard Commission recommendation that DoD “fully institutionalize baselining to improve program stability.”
- Required by Title 10, United States Code, Section 2435 (10 USC 2435) for Major Defense Acquisition Programs (MDAPs)
- DoD Instruction 5000.2 and the Defense Acquisition Guidebook, dated November 2004, provide policies and procedures for APBs and reporting APB breaches for all ACAT IC&ID and ACAT IAM&IAC programs

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# Acquisition Program Baseline (APB)

## ***Statutory Requirements***

- All MDAPs (ACAT IC/D programs) must have APBs
- No funds may be obligated after Milestone B for MDAPs without approved APB (unless waived by USD(AT&L))
- APB must be prepared before “system development and demonstration, production and deployment, and full rate production”
- SecDef must prescribe regulations governing:
  - Baseline contents
  - Submission of reports of baseline deviations
  - Procedures to review deviations
  - Procedures for submission of revised baselines
- For purposes of 10 USC 2433 (Nunn-McCurdy), there are Original and Current Baselines

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# Acquisition Program Baseline (APB)

## *Original Baseline*

- First APB prepared just before a program enters SDD (Milestone B) or program initiation, whichever occurs later
- For programs designated as MDAPs after Milestone B or program initiation, the Original APB is the first APB approved as an MDAP
- Serves as the current baseline description until a revised APB is prepared at a major milestone, full rate production, or deviation (breach)
- The cost estimate parameter may be revised under 10 U.S.C. 2435 only if a breach occurs that exceeds a critical cost growth threshold for the program under 10 U.S.C. 2433

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# Acquisition Program Baseline (APB)

## *Current Baseline*

- Shall be revised at major milestone decisions and at full rate production
- Revisions to cost or other APB parameters are not automatically authorized if there is a change to cost, schedule, or performance parameters
- May be revised only:
  - as a result of a major program restructure that is fully funded and approved by the MDA
  - as a result of a program deviation (breach), if the MDA determines that the breach is primarily beyond control of the PM
- Multiple revisions may not be authorized, and in no event will a revision be authorized if proposed merely to avoid a reportable breach,<sup>7</sup>
- MDA determines whether to revise the APB

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# Acquisition Program Baseline (APB)

## *Default Thresholds*

- Performance: No default. (*However, if no threshold provided, threshold same as objective values and vice versa*)
- Schedule: 6 months after the objective date
- Cost: 10% above objective values (BY\$)

*Note: Non-default thresholds can be used if justified and approved by the MDA*

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# Acquisition Program Baseline (APB)

## ***Deviations (Breach)***

- PM shall immediately notify the MDA of a deviation (beyond threshold) in any cost, schedule, or performance parameter (via Program Deviation Report (PDR))
- Within 30 days of occurrence of the deviation, the PM shall inform the MDA of the reason for the deviation and planned actions
- Within 90 days of occurrence of the deviation
  - A proposed revised APB shall be submitted for approval; or
  - An OIPT or equivalent Component-level review shall be held to review the program
- The MDA shall decide based on above criteria whether it is appropriate to approve a revision to an APB

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# Acquisition Program Baseline (APB)

## ***Baseline Contents***

- Cover Page (with “approval statement” and PM, PEO, CAE, and DAE signatures as appropriate)
- Performance Goals (Objectives and Thresholds): key performance parameters (KPPs)
- Schedule Goals (Objectives and Thresholds): major milestone decision points, IOC, and other critical events
- Cost Goals (Objectives and Thresholds): RDT&E, procurement, MILCON, acquisition-related O&M, program acquisition unit cost, average procurement unit cost, and other costs as determined by the MDA

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# Acquisition Program Baseline (APB)

## ***Miscellaneous***

- Revising Current APB at major milestone decisions/full rate production serves to update parameters based on knowledge developed during the current phase of the program (baselines evolve through the acquisition process)
- Periodic reporting on APB status is done through the DAES (quarterly) and the SAR (annual with quarterly exceptions)
- The base year used in the APB will change only at a major milestone decisions
- No breach thresholds for then-year dollars, total acquisition cost, total life cycle cost, or quantity

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## APB, SAR, and Nunn-McCurdy Status

### Selected Acquisition Report (SAR) Status

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# Selected Acquisition Report (SAR) *Status*

- Cost, schedule, and performance status on MDAPs required pursuant to 10 USC 2432
- On June 7, 2007, DoD submitted Section 803 report to Congress with recommended changes to SAR format and content:
  - Add percent change to Threshold Breach section
  - Revise Unit Cost Information section (PAUC and APUC table, delete unit cost report and unit cost history sections)
  - Delete contractor estimated price at completion, “planned” deliveries, and O&S cost element breakout
- Implementation of Section 803 changes planned for  
June 2008

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# Selected Acquisition Report (SAR) *Status*

- December 2007 SAR will be generated using the DAMIR SAR Web Application (classified and unclassified versions)\*
  - Current SAR Baselines (PEs/DEs/PdEs) must be broken out into year-by-year flyaway and support components (difficult task)
  - Current estimate from most recent SAR must be broken out into year-by-year flyaway and support components (some of this information already available)

\* *APB Web Application will be implemented at the same time*

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## APB, SAR, and Nunn-McCurdy Status

## Nunn-McCurdy Unit Cost Reporting Status

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# Nunn-McCurdy Unit Cost Reporting

## *Background/Purpose*

- To provide Congressional unit cost reporting for Major Defense Acquisition Programs (MDAPs)
- Drafted by Senator Nunn in 1982 (Representative McCurdy co-sponsored)
- Title 10, United States Code, Section 2433 (Unit Cost Reports) and Section 2435 (Baseline Description)
- Largely unchanged until FY06 National Defense Authorization Act (NDAA) in January 2006

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# Nunn-McCurdy Unit Cost Reporting

## *Unit Cost Measurements*

- Two UCR criteria:
  - Program Acquisition Unit Cost (PAUC)
  - Average Procurement Unit Cost (APUC)
- Definitions (in base-year \$) :
  - PAUC = [Total Development \$ + Procurement \$ + Construction \$] / Total program quantity
  - APUC = Total Procurement \$ / Procurement quantity

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# Nunn-McCurdy Unit Cost Reporting

## *Unit Cost Tracking*

- Compare ***Current Estimate*** to ***Current Baseline Estimate*** and to ***Original Baseline Estimate***
  - ***Current Estimate*** - Latest estimate of approved program
  - ***Current Baseline Estimate*** - currently approved Acquisition Program Baseline (APB)
  - ***Original Baseline Estimate*** - APB approved at Milestone B or program initiation, whichever occurs later

[Note: Original Baseline Estimate can be revised only after “Critical” Nunn-McCurdy breach]

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# Nunn-McCurdy Unit Cost Reporting

## *Unit Cost Tracking*

- Internal - Quarterly unit cost reporting required from program manager to Service Acquisition Executive via DAES
- External - Breach reporting via SAR (see below)

	“Significant” Breach	“Critical” Breach
Current Baseline Estimate	+15%	+25%
Original Baseline Estimate	+30%	+50%

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# Nunn-McCurdy Unit Cost Reporting

## *Reporting Requirements*

- For “Significant” breaches:
  - Service Secretary must notify Congress within 45 days after the report (normally program deviation report) upon which the determination is based
  - Submit a Selected Acquisition Report (SAR) with the required additional unit cost breach information

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# Nunn-McCurdy Unit Cost Reporting Requirements

- For “Critical” breaches,
  - In addition to notification and SAR, the USD(AT&L) must certify to Congress within 60 days of SAR that:
    1. *the program is essential to the national security*
    2. *there is no alternative which will provide equal or greater capability at less cost*
    3. *the new estimates of the PAUC and APUC are reasonable*
    4. *the management structure is adequate to control PAUC and APUC*

(Note: No certification required for a terminated program)

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# Nunn-McCurdy Unit Cost Reporting

## *Certification Process*

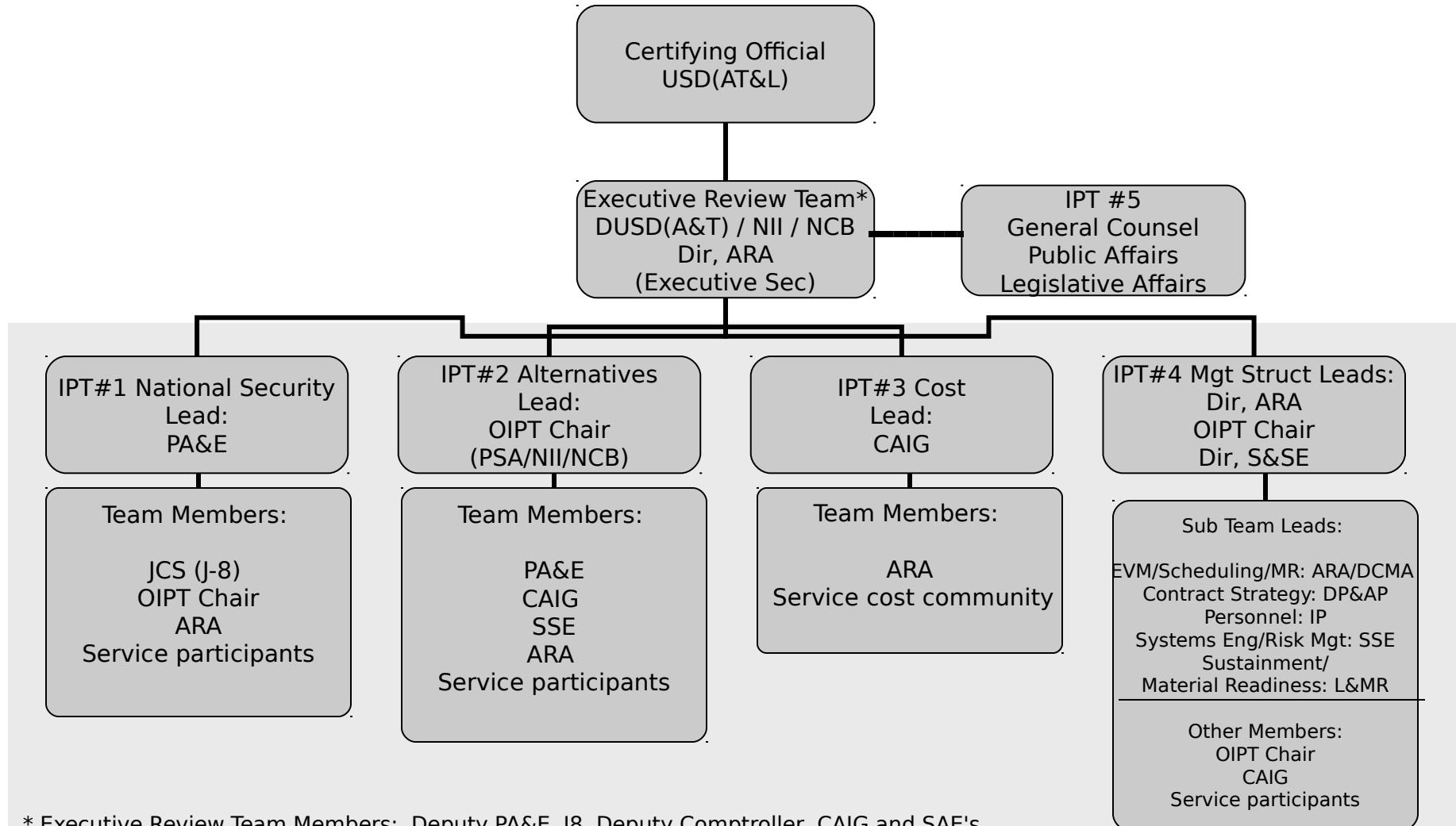
- USD(AT&L) establishes an IPT for each of the four certification criteria
- Periodic meetings held:
  - USD(AT&L)
  - Principals IPTs (i.e., Executive Review Team)
  - Joint Requirements Oversight Council (JROC)
- Site visits to contractor and PM locations
- Process outputs:
  - Certification package to Congress (Letters with supporting explanation)
  - Acquisition Decision Memorandum (ADM)

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# Nunn-McCurdy Unit Cost Reporting



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# Nunn-McCurdy Unit Cost Reporting *Nominal Schedule*

PM Submits PDR	October 2007-January 2008
Executive Review Team (ERT) Kick-off Meeting	January 2008
<b>Service Secretary Notification to Hill 2008</b>	<b>November 2007-Februar</b>
ERT Interim Meeting	February 2008
USD(AT&L) Initial Review	February 2008
Draft SAR to OSD	February 2008
Site Visits to Contractor/PM	February 2008
ERT Interim Meeting	March 2008
USD(AT&L) IPR	March 2008
<b>Final SAR to Congress</b>	<b>April 4, 2008</b>
ERT Interim Meeting	April 2008
USD(AT&L) IPR	April 2008
ERT Final Meeting	May 2008
USD(AT&L) Final Review	May 2008
Draft Certification and ADMs for Coordination	May 2008
<b>USD(AT&amp;L) Certification to Congress</b>	<b>June 3, 2008</b>

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## Nunn-McCurdy Unit Cost Reporting *Penalties*

- Suspension of Obligations
  - If either SAR or certification are not submitted on time, obligational authority suspended on all major contracts
  - Suspension shall cease to apply after 30 days of continuous session of Congress (starting from the date of receipt of SAR/certification)

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# Nunn-McCurdy Unit Cost Reporting

## *Anatomy of a Breach*

- Breaches can occur only to the Current APB or only to the Original APB, but most occur to both
- Normally, there are several contributing factors that cause programs to breach:
  - Significant reduction in quantity
  - Change in requirements since baseline
  - Development or production stretchouts
  - Technical or performance/reliability issues
  - Inadequate estimate at baseline
- Most (not all) programs with “Critical” breaches are certified by the USD(AT&L), but the certified program represents a restructuring of the “program of record”

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# Nunn-McCurdy Unit Cost *Current Reporting Status*

Service	<u><b>≥ 10% &lt; 15%</b></u> <b>(Near Breach)</b>	<u><b>≥ 15% and &lt; 25%</b></u> <b>("Significant")</b>	<u><b>≥ 25%</b></u> <b>("Critical")</b>
Army	FMTV (>25% ??)	ARH (+20%)	
Navy	MH-60S (+??%)		VH-71 (Determination imminent)
Air Force	B-2 RMP (>25% ??) MPS (>25% ??)	JASSM (+20%)	C-5 RERP (+50%) NPOESS (certified Jun 06)
DoD	JTRS GMR (>25% ??)		

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# Nunn-McCurdy Unit Cost Reporting

## *Original Baseline Status*

Service	$\geq 20\% < 30\%$ <b>(Near Breach)</b>	$\geq 30\% \text{ and } < 50\%$ <b>("Significant")</b>	$\geq 50\%$ <b>("Critical")</b>
Army	PAC-3 (+24%) STRYKER (+29%)	<u>Previously Reported:</u> ATIRCM/CMWS (+49%) CHEM DEMIL CMA (+34%) CMA NEWPORT (+42%) FBCB2 (+38%)	
Navy	E-2C REPRO (+20%)	<u>Previously Reported:</u> F/A-18 (+33%) MH-60S (+47%) VA CLASS (+42%)	
Air Force	C-130J (+27%)		<b>C-5 RERP (+70%)</b> JASSM (certification pending since Jun 07) NPOESS (certified Jun 06)
		<u>Previously Reported:</u> JSF (+38%)	

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# Nunn-McCurdy Unit Cost Reporting

## *Issues Going Forward*

- As a result of FY06 NDAA, DoD will report more “Significant” and “Critical” Nunn-McCurdy breaches
  - Streamline/tailor certification process?
  - Take “Significant” breaches more seriously
- To mitigate increased number of breaches, early warning needed:
  - Increased awareness by Services during budget build
  - Monthly DAES reviews (Total program EVM, DCMA “tripwires”)
  - Work closely with CAIG & Service cost community